

# Weekly Report for 2015/12/21-2015/12/27

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## Progress

### 1. TCPTree Project

### 2. Large Graph Visualization

We tested the performance of ego network view, the result is shown below:

nodeCount	search start	search end	render start	render end	search time	render time	total time
823	3.042	3.487	3.51	3.843	0.45	0.333	0.78
957	33.657	34.178	34.202	34.479	0.52	0.277	0.80
1045	57.793	58.312	58.335	58.726	0.52	0.391	0.91
1123	19.299	19.851	19.875	20.301	0.55	0.426	0.98
1321	1.726	2.31	2.333	2.808	0.58	0.475	1.06
1963	48.27	49.177	49.205	49.746	0.91	0.541	1.45

Table 1

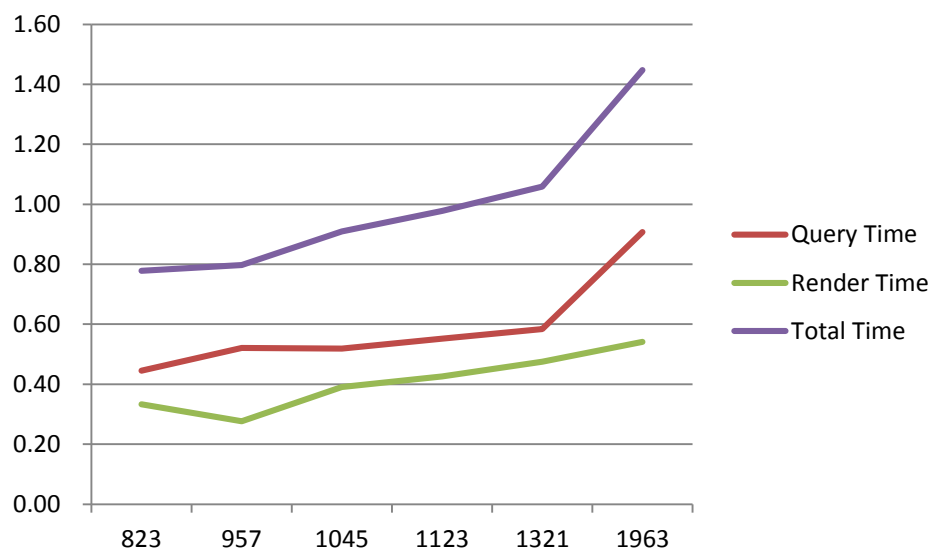


Figure 1

The system can render the ego network with 1963 nodes within 1 sec.

### **3. Vis 2016 Paper**

I think the logic of the introduction should be:

Dynamic network visualization→extract special nodes→structural hole spanners→data mining techniques→visualization.

Prof. Wu found the source code of Tangjie's paper. Chenyang is reading the source code and test the code with small dataset.

## **Plan**

### **1. TCPTree Project**

### **2. Large Graph**

Initial layout of community

Finish the ego network visualization

### **3. Vis 2016 Paper**

#### **1. Project plan and milestones:**

Paper:

12.30 Finish related work

1.20 Finish introduction

2.10 Finish visual design

2.30 Finish discussion

3.21 Finish abstract

3.25 Finish evaluation

System:

Evaluation:

Data:

Find Nan Cao's vis2015 paper and read them, see how to combine visualization with data mining model.